

REMARKS

Applicant respectfully requests reconsideration and allowance of the subject application. Claims 1, 9, 21, 22, 24, 26, 27, 28, 29, 34, 38, 40, 45, and 50 are amended. Claim 37 is canceled without prejudice. Claims 1-22, 24-36, 38-46, 50, and 52-57 are pending in this application.

35 U.S.C. § 102

Claims 9-12, 16, 18, 19, 21, and 24 stand rejected under 35 U.S.C. §102(e) as being unpatentable over U.S. Patent No. 6,363,210 to Owashi et al. (hereinafter "Owashi"). Applicant respectfully submits that claims 9-12, 16, 18, 19, 21, and 24 are not anticipated by Owashi.

Owashi discloses encrypting, at a broadcast station, a requested program and delivering the resulting signal as main data (see, Fig. 5 and col. 9, lines 1-37). The main data is multiplexed with an initial value of a key signal, identifying code of the user and program information (see, col. 9, lines 37-40).

A receiver decoder receives the signal from the broadcasting station (see, Fig. 6 and col. 9, lines 57-59) and demodulates the signal (see, col. 10, lines 1-12). A user identifying code and an initial value of the key signal for decryption of a cipher of main data, which are superimposed on the signal, are demultiplexed and extracted from the encrypted main data (see, col. 10, lines 13-16). The user identifying code inputted to the IC card of the receiver decoder is collated with a user ID stored in a memory so that a managing circuit may extract the initial value of the key signal to the objective program (see, col. 10, lines 19-23). Then, an arithmetic circuit operates the initial value of the key signal to the objective

program pursuant to specified algorithm to calculate the key signal on the basis of the initial value of the key signal (see, col. 10, lines 24-27). An encryption circuit encrypts the key signal by using the user ID delivered out of the managing circuit inside the IC card (see, col. 10, lines 55-57). The key signal encrypted by the encryption circuit is multiplexed with the main data and the resulting signal is delivered out of an output terminal to a VTR (see, col. 10, line 65 – col. 11, line 4).

In contrast, amended claim 9 is directed to a smart card comprising:

a key, associated with one particular household, to be used to encrypt and decrypt media content that is associated with the one particular household and that is to be rendered at the one particular household, but not to encrypt and decrypt media content associated with other households; and

a data storage section to store data that is expected to be of value to a user.

Applicant respectfully submits that Owashi does not disclose or suggest a smart card as claimed in amended 9.

As discussed above, in Owashi an encryption circuit of the receiver decoder encrypts a key signal. The main data of Owashi, however, is not encrypted by the receiver decoder. Applicant respectfully submits that nowhere does Owashi discuss encrypting the main data of Owashi. Rather, the main data passes through to the VTR without being encrypted by the encryption circuit of the receiver decoder. The key signal of Owashi is used to decrypt the main data, which was received by the receiver decoder from the broadcast station in encrypted form (see, col. 11, line 58 – col. 12, line 6, and col. 9, lines 31-51). Thus, the encryption performed at the receiver decoder of Owashi is for the key signal rather than for media content that is to be rendered at a particular household as claimed in

amended claim 9. Thus, Applicant respectfully submits that Owashi does not disclose or suggest a key to be used to encrypt media content that is to be rendered at the one particular household as claimed in amended claim 9.

For at least these reasons, Applicant respectfully submits that amended claim 9 is allowable over Owashi.

Given that claims 10-12 depend from amended claim 9, Applicant respectfully submits that claims 10-12 are likewise allowable over Owashi for at least the reasons discussed above with reference to amended claim 9.

With respect to claim 16, Applicant respectfully submits that, similar to the discussion of amended claim 9 above, Owashi does not disclose or suggest encrypting, at the user's home, the media content as recited in claim 16. For at least these reasons, Applicant respectfully submits that claim 16 is allowable over Owashi.

Given that claims 18 and 19 depend from claim 16, Applicant respectfully submits that claims 18 and 19 are likewise allowable over Owashi for at least the reasons discussed above with reference to claim 16.

With respect to amended claim 21, amended claim 21 recites in part:

 checking whether a portable integrated circuit device is authorized to decrypt the media content, wherein the portable integrated circuit device stores a decryption key and additional data;

 determining that the portable integrated circuit device is authorized to decrypt the media content only if data other than electronic money is stored as the additional data on the portable integrated circuit device, wherein the data is expected to be of value to a user, and wherein the data is not used to decrypt the media content; and

 decrypting the media content only if the portable integrated circuit device is authorized to decrypt the media content.

In the July 18 Office Action, it was asserted that the arithmetic algorithm of Owashi discloses the data other than electronic money as recited in claim 21 (see, July 18 Office Action at ¶ 3, p. 3). However, as discussed above, the arithmetic circuit of Owashi operates the initial value of the key signal to the objective program pursuant to specified algorithm to calculate the key signal on the basis of the initial value of the received key signal; and the key signal of Owashi is used to decrypt the main data, which was received by the receiver decoder from the broadcast station in encrypted form. Thus, since the arithmetic algorithm of Owashi generates the key signal that is used to decrypt the main data of Owashi, Applicant respectfully submits that the arithmetic algorithm of Owashi is used to decrypt the main data of Owashi. Thus, Applicant respectfully submits that Owashi does not disclose or suggest determining that the portable integrated circuit device is authorized to decrypt the media content only if data other than electronic money is stored as the additional data on the portable integrated circuit device, wherein the data is not used to decrypt the media content as recited in amended claim 21.

For at least these reasons, Applicant respectfully submits that amended claim 21 is allowable over Owashi.

Given that claim 24 depends from amended claim 21, Applicant respectfully submits that claim 24 is likewise allowable over Owashi for at least the reasons discussed above with reference to amended claim 21.

Applicant respectfully requests that the §102 rejections be withdrawn.

35 U.S.C. § 103

Claims 1, 2, 5-8, 13, 14, 26-32, 34-45, 50, 52, 53, and 55-57 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Owashi in view of U.S. Patent No. 5,666,412 to Handelman et al. (hereinafter “Handelman”) and U.S. Patent No. 6,378,130 to Adams (hereinafter “Adams”). Claim 37 has been canceled without prejudice, thereby rendering the rejection of claim 37 moot. Applicant respectfully submits that claims 1, 2, 5-8, 13, 14, 26-32, 34-45, 50, 52, 53, and 55-57 are not obvious over Owashi in view of Handelman and Adams.

With respect to amended claim 1, Applicant respectfully submits that, similar to the discussion of amended claim 9 above, Owashi does not disclose or suggest a key, associated with a household, to be used to encrypt and decrypt media content at the household that is associated with the household as recited in amended claim 1. Handelman and Adams are not cited as curing this deficiency of Owashi, and Applicant respectfully submits that Handelman and Adams do not cure this deficiency of Owashi. For at least these reasons, Applicant respectfully submits that amended claim 1 is allowable over Owashi in view of Handelman and Adams.

Given that claims 2, 5-8, and 55-57 depend from amended claim 1, Applicant respectfully submits that claims 2, 5-8, and 55-57 are likewise allowable over Owashi in view of Handelman and Adams for at least the reasons discussed above with reference to amended claim 1.

With respect to claims 13 and 14, claims 13 and 14 depend from amended claim 9, and Applicant respectfully submits that claims 13 and 14 are likewise

allowable over Owashi in view of Handelman and Adams for at least the reasons discussed above with reference to amended claim 1.

With respect to amended claim 26, Applicant respectfully submits that, similar to the discussion of amended claim 9 above, Owashi does not disclose or suggest an encryption module coupled to receive a multimedia presentation and encrypt, at the user's home, the multimedia presentation as recited in amended claim 26. Handelman and Adams are not cited as curing this deficiency of Owashi, and Applicant respectfully submits that Handelman and Adams do not cure this deficiency of Owashi. For at least these reasons, Applicant respectfully submits that amended claim 26 is allowable over Owashi in view of Handelman and Adams.

Given that claims 27 and 28 depend from amended claim 26, Applicant respectfully submits that claims 27 and 28 are likewise allowable over Owashi in view of Handelman and Adams for at least the reasons discussed above with reference to amended claim 26.

With respect to claim 29, Applicant respectfully submits that, similar to the discussion of amended claim 9 above, Owashi does not disclose or suggest encrypting, at the household, the received media content based on a household identifier corresponding to a smart card, wherein the household identifier is associated with one household as recited in amended claim 29. Handelman and Adams are not cited as curing this deficiency of Owashi, and Applicant respectfully submits that Handelman and Adams do not cure this deficiency of Owashi. For at least these reasons, Applicant respectfully submits that amended claim 29 is allowable over Owashi in view of Handelman and Adams.

Given that claims 30-32 depend from amended claim 29, Applicant respectfully submits that claims 30-32 are likewise allowable over Owashi in view of Handelman and Adams for at least the reasons discussed above with reference to amended claim 29.

With respect to amended claim 34, Applicant respectfully submits that, similar to the discussion of amended claim 9 above, Owashi does not disclose or suggest allowing access to the media content if the rating corresponding to the media content does not exceed the rating associated with the smart card, wherein the allowing access comprises allowing the media content to be encrypted, at a user's home, for subsequent processing as recited in amended claim 34. Handelman and Adams are not cited as curing this deficiency of Owashi, and Applicant respectfully submits that Handelman and Adams do not cure this deficiency of Owashi. For at least these reasons, Applicant respectfully submits that amended claim 34 is allowable over Owashi in view of Handelman and Adams.

Given that claims 35 and 36 depend from amended claim 34, Applicant respectfully submits that claims 35 and 36 are likewise allowable over Owashi in view of Handelman and Adams for at least the reasons discussed above with reference to amended claim 34.

With respect to amended claim 38, Applicant respectfully submits that, similar to the discussion of amended claim 9 above, Owashi does not disclose or suggest controlling, at the household, encryption of the received media content based on a household identifier corresponding to a smart card as recited in amended claim 38. Handelman and Adams are not cited as curing this deficiency

of Owashi, and Applicant respectfully submits that Handelman and Adams do not cure this deficiency of Owashi. For at least these reasons, Applicant respectfully submits that amended claim 38 is allowable over Owashi in view of Handelman and Adams.

Given that claim 39 depends from amended claim 38, Applicant respectfully submits that claim 39 is likewise allowable over Owashi in view of Handelman and Adams for at least the reasons discussed above with reference to amended claim 38.

With respect to amended claim 40, Applicant respectfully submits that, similar to the discussion of amended claim 9 above, Owashi does not disclose or suggest a key, associated with one particular household, to be used to encrypt and decrypt media content associated with the one particular household at the one particular household but not to encrypt and decrypt media content associated with other households as recited in amended claim 40. Handelman and Adams are not cited as curing this deficiency of Owashi, and Applicant respectfully submits that Handelman and Adams do not cure this deficiency of Owashi. For at least these reasons, Applicant respectfully submits that amended claim 40 is allowable over Owashi in view of Handelman and Adams.

Given that claims 41-44 depend from amended claim 40, Applicant respectfully submits that claims 41-44 are likewise allowable over Owashi in view of Handelman and Adams for at least the reasons discussed above with reference to amended claim 40.

With respect to amended claim 45, Applicant respectfully submits that, similar to the discussion of amended claim 9 above, Owashi does not disclose or

suggest maintaining, on an integrated circuit card, a key to be used to encrypt and decrypt media content associated with one particular household at the one particular household but not to encrypt and decrypt media content associated with other households as recited in amended claim 45. Handelman and Adams are not cited as curing this deficiency of Owashi, and Applicant respectfully submits that Handelman and Adams do not cure this deficiency of Owashi. For at least these reasons, Applicant respectfully submits that amended claim 45 is allowable over Owashi in view of Handelman and Adams.

With respect to amended claim 50, Applicant respectfully submits that, similar to the discussion of amended claim 9 above, Owashi does not disclose or suggest encrypting, at a single house, media content based on an identifier corresponding to a plurality of smart cards as recited in amended claim 50. Handelman and Adams are not cited as curing this deficiency of Owashi, and Applicant respectfully submits that Handelman and Adams do not cure this deficiency of Owashi. For at least these reasons, Applicant respectfully submits that amended claim 50 is allowable over Owashi in view of Handelman and Adams.

Given that claims 52 and 53 depend from amended claim 50, Applicant respectfully submits that claims 52 and 53 are likewise allowable over Owashi in view of Handelman and Adams for at least the reasons discussed above with reference to amended claim 50.

Claims 20, 25, 33, and 46 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Owashi in view of Handelman and U.S. Patent No. 5,805,204 to Thompson et al. (hereinafter “Thompson”). Applicant respectfully submits that

claims 20, 25, 33, and 46 are not obvious over Owashi in view of Handelman and Thompson.

Claims 20, 25, 33, and 46, depend from claims 16, 21, 29, and 45, respectively. Applicant respectfully submits that each of claims 16, 21, 29, and 45 is allowable over Owashi as discussed above. Handelman and Thompson are not cited as curing the deficiencies of Owashi discussed above with respect to claims 16, 21, 29, and 45, and Applicant respectfully submits that Handelman and Thompson do not cure these deficiencies of Owashi. For at least these reasons, Applicant respectfully submits that claims 20, 25, 33, and 46 are allowable over Owashi in view of Handelman and Thompson.

Claims 3, 4, 15, 17, and 22 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Owashi in view of Handelman and U.S. Patent No. 5,744,787 to Teicher (hereinafter “Teicher”). Applicant respectfully submits that claims 3, 4, 15, 17, and 22 are not obvious over Owashi in view of Handelman and Teicher.

Claims 3 and 4 depend from claim 1, claim 15 depends from claim 9, claim 17 depends from claim 16, and claim 22 depends from claim 21. Applicant respectfully submits that each of claims 1, 9, 16, and 22 is allowable over Owashi as discussed above. Handelman and Teicher are not cited as curing the deficiencies of Owashi discussed above with respect to claims 1, 9, 16, and 22, and Applicant respectfully submits that Handelman and Teicher do not cure these deficiencies of Owashi. For at least these reasons, Applicant respectfully submits that claims 3, 4, 15, 17, and 22 are allowable over Owashi in view of Handelman and Teicher.

Claim 54 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Owashi in view of Handelman and Adams and U.S. Patent No. 5,841,119 to Rouyrre et al. (hereinafter “Rouyrre”). Applicant respectfully submits that claim 54 is not obvious over Owashi in view of Handelman and Adams and Rouyrre.

Claim 54 depends from claim 50. Applicant respectfully submits that claim 50 is allowable over Owashi in view of Handelman and Adams as discussed above. Rouyrre is not cited as curing the deficiencies of Owashi, Handelman, and Adams as discussed above with respect to claim 50, and Applicant respectfully submits that Rouyrre does not cure the deficiencies of Owashi, Handelman, and Adams. For at least these reasons, Applicant respectfully submits that claim 54 is allowable over Owashi in view of Handelman, Adams, and Rouyrre.

Applicant respectfully requests that the §103 rejections be withdrawn.

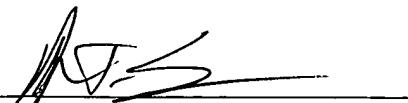
Conclusion

Claims 1-22, 24-36, 38-46, 50, and 52-57 are in condition for allowance. Applicant respectfully requests reconsideration and issuance of the subject application. Should any matter in this case remain unresolved, the undersigned attorney respectfully requests a telephone conference with the Examiner to resolve any such outstanding matter.

Respectfully Submitted,

Date: 1/17/03

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Version of Claims with Markings to Show Changes Made

1. (Amended) A smart card comprising:
 - a key, associated with a household, to be used to encrypt and decrypt media content at the household that is associated with the household; and
 - a memory unit, the memory unit including,
 - a user-specific information storage section to store user preferences, and
 - a data storage section to store data that is expected to be of value to a user.
9. (Twice Amended) A smart card comprising:
 - a key, associated with one particular household, to be used to encrypt and decrypt media content that is associated with the one particular household and that is to be rendered at the one particular household, but not to encrypt and decrypt media content associated with other households; and
 - a data storage section to store data that is expected to be of value to a user.
21. (Three Times Amended) A method of decrypting media content, the method comprising:
 - checking whether a portable integrated circuit device [smart card] is authorized to decrypt the media content, wherein the portable integrated circuit device [smart card] stores a decryption key and additional data;
 - determining that the portable integrated circuit device [smart card] is authorized to decrypt the media content only if data other than electronic money

[or a decryption key] is stored as the additional data on the portable integrated circuit device [smart card], wherein the data is expected to be of value to a user, and wherein the data is not used to decrypt the media content; and

decrypting the media content only if the portable integrated circuit device [smart card] is authorized to decrypt the media content.

22. (Amended) A method as recited in claim 21, further comprising determining that the portable integrated circuit device [smart card] is authorized to decrypt the media content if at least a threshold amount of electronic money is available on the portable integrated circuit device [smart card].

24. (Amended) A method as recited in claim 21, further comprising: checking whether the portable integrated circuit device [smart card] is authorized to encrypt media content; and
encrypting the media content only if the portable integrated circuit device [smart card] is authorized to encrypt the media content.

26. (Twice Amended) A system comprising:
a plurality of smart cards, each to be used for encrypting different categories of multimedia presentations [media content]; and
an encryption module coupled to receive a multimedia presentation [media content] and encrypt, at the user's home, the multimedia presentation [media content] based on a key maintained on one of the plurality of smart cards.

27. (Amended) A system as recited in claim 26, further comprising a decoding module, coupled to receive the encrypted multimedia presentation [media content], decrypt the encrypted multimedia presentation [media content], decode the decrypted multimedia presentation [media content], and transmit the decoded multimedia presentation [media content] to a rendering module.

28. (Amended) A system as recited in claim 26, wherein one of the categories of multimedia presentations [media content] comprises family-oriented media content and another of the categories of multimedia presentations [media content] comprises adult-oriented media content.

29. (Twice Amended) A method of allowing parental control over media content, the method comprising:

receiving, at a household, media content;

encrypting, at the household, the received media content based on a household identifier corresponding to a smart card, wherein the household identifier is associated with one household; and

requiring the smart card to be present to decrypt and render the media content.

34. (Twice Amended) A method of allowing parental control over media content, the method comprising:

comparing a rating corresponding to the media content to a rating associated with a smart card; and

allowing access to the media content if the rating corresponding to the media content does not exceed the rating associated with the smart card, wherein a plurality of ratings do not exceed the rating associated with the smart card, and wherein the allowing access comprises allowing the media content to be encrypted, at a user's home, for subsequent processing.

38. (Amended) One or more computer-readable media having stored thereon a computer program that, when executed by a computing device, causes the computing device to perform acts including:

receiving, at a household, media content;
controlling, at the household, encryption of the received media content based on a household identifier corresponding to a smart card; and
maintaining user preferences information on the smart card, the user preferences information being available only when the smart card is coupled to the computing device.

40. (Twice Amended) A smart card comprising:
a key, associated with one particular household, to be used to encrypt and decrypt media content associated with the one particular household at the one particular household but not to encrypt and decrypt media content associated with other households; and
a user-specific information storage section to store user preferences.

45. (Twice Amended) A method comprising:

maintaining, on an integrated circuit card [a smart card], information regarding a user's preferences corresponding to media content; and

maintaining, on the integrated circuit card [a smart card], a key to be used to encrypt and decrypt media content associated with one particular household at the one particular household but not to encrypt and decrypt media content associated with other households.

50. (Twice Amended) A method of identifying boundaries of a network of devices, the method comprising:

encrypting, at a single house, media content based on an identifier corresponding to a plurality of smart cards; and

limiting rendering of the media content to a network of devices to which the plurality of smart cards are coupled, wherein the network of devices is maintained within the [a] single house.